

Notice of Allowability

Application No.

10/666,642

Applicant(s)

JIANG ET AL.

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 6/29/2006.
2. ☒ The allowed claim(s) is/are 21-29, 31, 34-38, 41-43 (renumbered 1-18).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

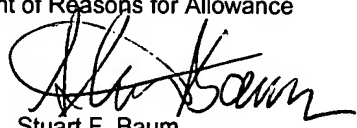
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Stuart F. Baum

EXAMINER'S AMENDMENT

RCE Acknowledgment

1. The request filed on 6/29/2006 for a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114, based on parent Application No. 10/666,642 is acceptable and a RCE has been established. An action on the RCE follows.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Jeffrey M. Libby on 9/7/2006.

4. IN THE CLAIMS:

--Claim 21 (currently amended): A transgenic plant transformed with an expression vector comprising a polynucleotide sequence encoding a polypeptide having a conserved domain that has at least 70% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194, wherein the conserved domain is a WRKY DNA-binding domain [required for a function by the polypeptide of regulating transcription] and expression of the polynucleotide in said transgenic plant results in said plant having a [the polypeptide confers to the transgenic plant] greater tolerance to water deprivation than a control plant.--

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--Claim 24 (currently amended): A method for producing a transgenic plant having greater tolerance to water deprivation than a control plant, the method steps comprising:

(a) providing an expression vector comprising:

(i) a polynucleotide sequence encoding a polypeptide comprising a conserved domain that has at least 70% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194, wherein the conserved domain is a WRKY DNA-binding domain [required for a function by the polypeptide of regulating transcription] and expression of the polynucleotide in said transgenic plant results in said plant having a [the polypeptide confers to the transgenic plant] greater tolerance to water deprivation than a control plant; and

(ii) at least one regulatory element operably linked to the polynucleotide sequence, wherein said at least one regulatory element controls expression of the polynucleotide sequence in a target plant;

(b) introducing the expression vector into at least one plant; and

(c) selecting at least one transgenic plant that has greater tolerance to water deprivation than the control plant.

Claim 25 (currently amended): The method of claim 24, wherein the polypeptide comprises a conserved domain that has at least 80% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ IDNO: 194 wherein the conserved domain is a WRKY DNA-binding domain and expression of the polynucleotide in the transgenic plant results in said plant having a greater tolerance to water deprivation than a control plant.

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Claim 26 (currently amended): The method of claim 24, wherein the polypeptide comprises a conserved domain that has at least 85% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194 wherein the conserved domain is a WRKY DNA-binding domain and expression of the polynucleotide in the transgenic plant results in said plant having a greater tolerance to water deprivation than a control plant.--

--Claim 35 (currently amended): A method for increasing the tolerance of a plant to water deprivation, the method steps comprising:

(a) providing an expression vector comprising:

(i) a polynucleotide sequence encoding a polypeptide comprising a conserved domain that has at least 70% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194, wherein the conserved domain is a WRKY DNA-binding domain [required for a function by the polypeptide of regulating transcription] and expression of the polynucleotide in the transgenic plant results in said plant having a [the polypeptide confers to the transgenic plant] greater tolerance to water deprivation than a control plant; and

(ii) at least one regulatory element flanking the polynucleotide sequence, wherein said at least one regulatory element controls expression of the polynucleotide sequence in a target plant;

(b) introducing the expression vector into a plant, thereby producing a transgenic plant;
and

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(c) selecting a transgenic plant having greater tolerance to water deprivation than a control plant.

Claim 36 (currently amended): The method of claim 35, wherein the polypeptide comprises a conserved domain that has at least 80% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194 wherein the conserved domain is a WRKY DNA-binding domain and expression of the polynucleotide in the transgenic plant results in said plant having a greater tolerance to water deprivation than a control plant.

Claim 37 (currently amended): The method of claim 35, wherein the polypeptide comprises a conserved domain that has at least 85% sequence identity to the conserved domain of amino acid coordinates 111-164 of SEQ ID NO: 194 wherein the conserved domain is a WRKY DNA-binding domain and expression of the polynucleotide in the transgenic plant results in said plant having a greater tolerance to water deprivation than a control plant.--

5. The following is an examiner's statement of reasons for allowance:

Support for the Examiner's Amendment to claims 21, 24-26 and 35 can be found on page 21, lines 29-31; page 61, lines 5-7; page 82, last row in the Figure; and page 409, lines 31-32.

Claims 21-29, 31, 34-38 and 41-43 are deemed free of the prior art, given the failure of the prior art to teach or reasonably suggest a transgenic plant transformed with an expression vector or a method for producing a transgenic plant having a greater tolerance to water deprivation than a control plant comprising a polynucleotide sequence encoding a polypeptide having a conserved domain that has at least 70%, 80% or 85% sequence identity to amino acid coordinates 111-164 of SEQ ID NO:194, wherein the conserved domain is a WRKY DNA-

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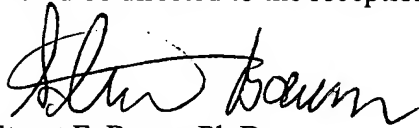
binding domain and expression of the polynucleotide in the transgenic plant results in said plant having a greater tolerance to water deprivation than a control plant.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

A handwritten signature in black ink, appearing to read "Stuart F. Baum". The signature is fluid and cursive, with the first name "Stuart" being more prominent and the last name "Baum" following in a similar style.

Stuart F. Baum Ph.D.

Primary Examiner

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September 14, 2006